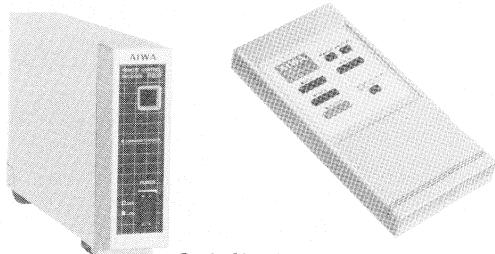


SERVICE MANUAL

MODEL NO.

REMOTE CONTROL SET

RC-R200Y



Code No. 22-200-000-34

REMOTE CONTROL SET

RC-R500H,HU,E,K,G



Code No. 22-500-000-58

DATE OF ISSUE 12/1981

SPECIFICATIONS

RC-R200

Semiconductors: 4 ICs, 9 transistors, 16 diodes,
Power supply: DC 9V (DC 7.2V ~ 10V)
Dimensions: 31 (W) x 110 (H) x 230 (D) mm
Weight: 500g
OSC frequency: Standard OSC frequency 455 kHz ± 2 kHz
Carrier 37.91 kHz ± 170 kHz
Distance: approx. 5m (15 feet)
Transmission field: ±20° (2m)

« Wireless transmitter section »
Semiconductors: 2 ICs, 2 transistors, 2 diodes, 2 LEDs
Power supply: DC 3V (3.2V ~ 2.4V)
Current consumption: 30μA
Dimensions: 64 (W) x 21 (H) x 134 (D) mm
Weight: 100g
Transmission field: ±20° (2m)
Transmission distance: approx. 5m
OSC frequency: Standard OSC frequency 455 kHz ± 2 kHz
Carrier 37.91 kHz ± 170 kHz

Semiconductors:

Power supply:

Power consumption: 10 W
Dimensions: 250 (W) x 71 (H) x 241 (D) mm
Weight: 2.3 kg

Frequency response: 10 ~ 50 kHz (+0.5 dB)
Total harmonic distortion: Less than 0.7% (1 kHz)
S/N ratio: More than 55 dB (PHONO 1)

Distance: More than 55 dB (TUNER)
Inputs: More than 55 dB (AUX 1)

approx. 5 m
150 mV/47 kΩ

(PHONO 1, TUNER, AUX 1, TAPE INPUT 1)

150 mV/47 kΩ

(TAPE OUTPUT 1)

150 V/47 kΩ

(OUTPUT)

RC-R500

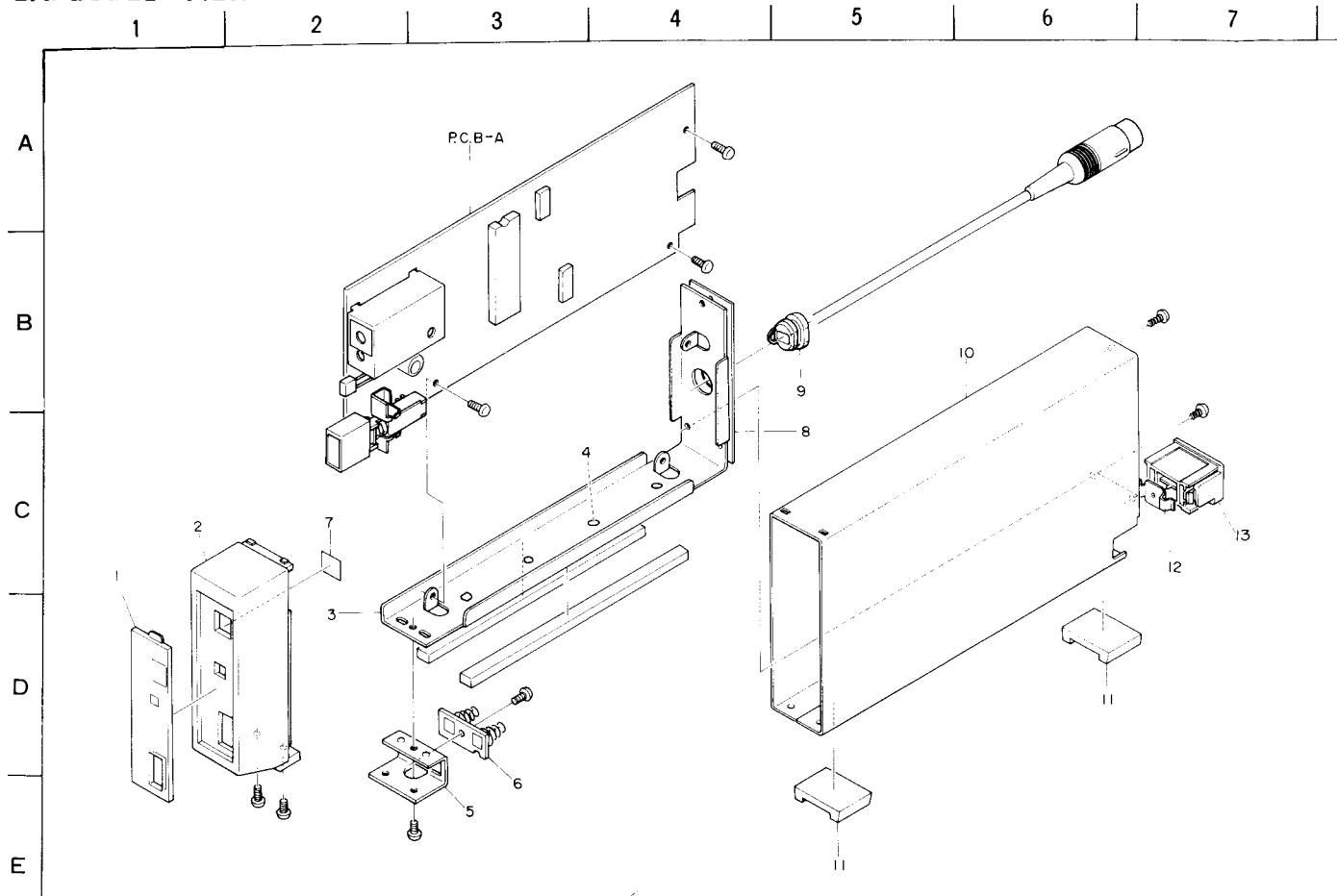
Semiconductors: 17ICs, 25 transistors, 56 diodes, 8 LED
Power supply: H, HU model
AC 110 ~ 120/220 ~ 240V
Switchable, 50/60 Hz
E model: AC 220V
K, G model: 50 Hz
AC 240V: K, G model
50 Hz
10 W: 100g
Dimensions: 250 (W) x 71 (H) x 241 (D) mm
Weight: 2.3 kg

Frequency response: 10 ~ 50 kHz (+0.5 dB)
Total harmonic distortion: Less than 0.7% (1 kHz)
S/N ratio: More than 55 dB (PHONO 1)
Distance: More than 55 dB (TUNER)
Inputs: More than 55 dB (AUX 1)
approx. 5 m
150 mV/47 kΩ
(PHONO 1, TUNER, AUX 1, TAPE INPUT 1)
150 mV/47 kΩ
(TAPE OUTPUT 1)
150 V/47 kΩ
(OUTPUT)

« Wireless transmitter section »
Semiconductors: 2 ICs, 2 transistors, 2 diodes, 2 LEDs
Power supply: DC 3V (3.2V ~ 2.4V)
Current consumption: 30 μA
Dimensions: 63 (W) x 22 (H) x 141.5 (D) mm
Weight: 100 g
Transmission field: ±20° (2m)
Transmission distance: approx. 5 m
OSC. frequency: Standard OSC. frequency 455 kHz ± 2 kHz
Carrier 39.91 kHz ± 170 Hz

- The specifications and external appearance of this set are subject to change without prior notice.

EXPLODED VIEW



PARTS LIST

MECHANICAL PARTS

■ * mark in this part list shows exclusive part.

| Ref. No. | Part No. | Part No. Changed to | Description | Common Model | Q'ty |
|----------|---------------|------------------------|------------------|-----------------|------|
| 1 | 86-199-012-01 | | Window | * | 1 |
| 2 | 86-199-010-01 | | Panel, Front | * | 1 |
| 3 | 86-199-201-01 | | Chassis, Amp. | * | 1 |
| 4 | 86-199-202-01 | | Holder, Battery | * | 1 |
| 5 | 86-199-203-01 | | Guide, Battery | * | 1 |
| 6 | 86-199-205-01 | | C-spring | * | 2 |
| 7 | 86-199-206-01 | | Plate | * | 1 |
| 8 | 86-199-017-01 | | Jack plate | * | 1 |
| 9 | 86-199-208-01 | | Cord bushing | * | 1 |
| 10 | 86-199-011-01 | | Cabinet, Steel | * | 1 |
| 11 | 86-199-014-01 | | Rubber foot | * | 2 |
| 12 | 86-199-207-01 | | Battery terminal | * | 1 |
| 13 | 86-199-013-01 | | Battery room lid | * | 1 |

SCHEMATIC DIAGRAM, WIRING=RC-T200Y

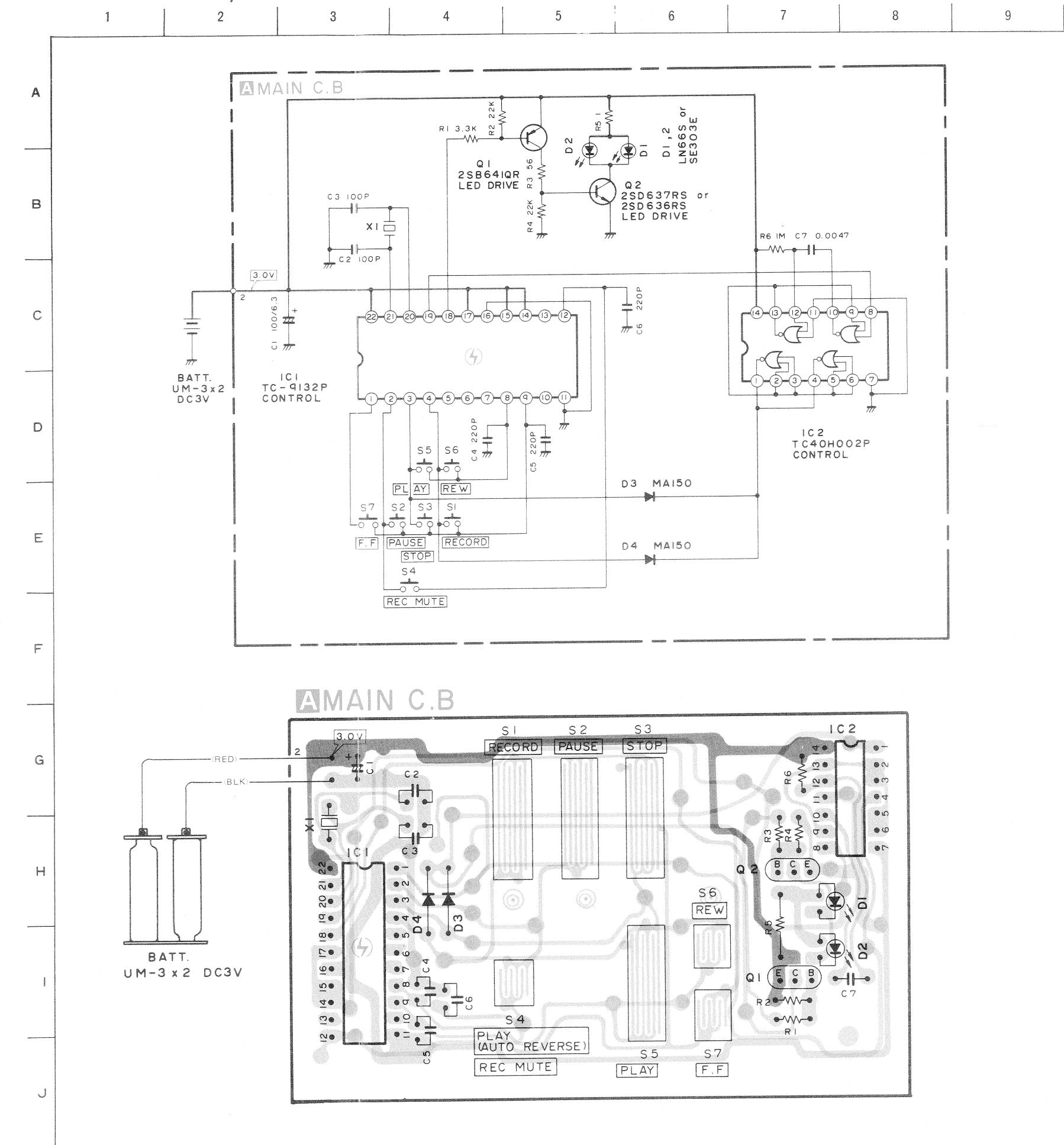
ELECTRICAL MAIN PARTS LIST

| Symbol No. | Part No. | Description |
|---|---------------|---------------------------------------|
| << MAIN CIRCUIT BOARD SECTION >> | | |
| PCB-A | 86-199-610-01 | Main circuit board |
| IC1 | 87-027-826-01 | IC, μ PC1373H |
| ④ IC2 | 87-027-828-01 | IC, TC9134P |
| IC3,4 | 87-027-827-01 | IC, TC4069UBP |
| Q1,2,3,4, 5,6,7,8, 9 | 89-318-054-01 | Transistor, 2SC1815(Y) |
| D1 | 87-026-186-01 | Photo diode PIN PN313 |
| D2 | 88-051-060-01 | Diode, IN60 |
| D3 | 87-027-369-01 | Zener diode, 05Z6.2L |
| D5,6,7,8 9,10,11,12, 13,14,15,16 17 | 87-027-097-01 | Diode, 1S1555 |
| L1 | 87-003-067-01 | Choke coil, 5mH |
| X1 | 87-008-247-01 | Ceramic, KBR455B |
| S1 | 87-031-694-01 | Push-switch (POWER) |
| << MISCELLANEOUS >> | | |
| J1 | 86-199-601-01 | 8P DIN plug ass'y |
| | 86-199-208-01 | Cord bushing |
| | 86-198-800-01 | Remote control transmitter RC-T200 |

C-MOS IC handling precaution

The C-MOS IC's construction makes this part susceptible to damage by static electricity and so take sufficient care in regard to following articles.

1. Need to be put on conductive sheet, to be put in a metallic box and to be wrapped by aluminium foil for transportation and deposit.
2. To use solder iron less than 40W (less than 260°C) of power consumption for soldering. But do not overheat more than 10 second.
3. Do not perform a conductivity test with a tester, etc. Refer to the circuit voltages of each part.
4. The ICs on the electrical parts which are indicated by an C-MOS IC symbol mark (④).



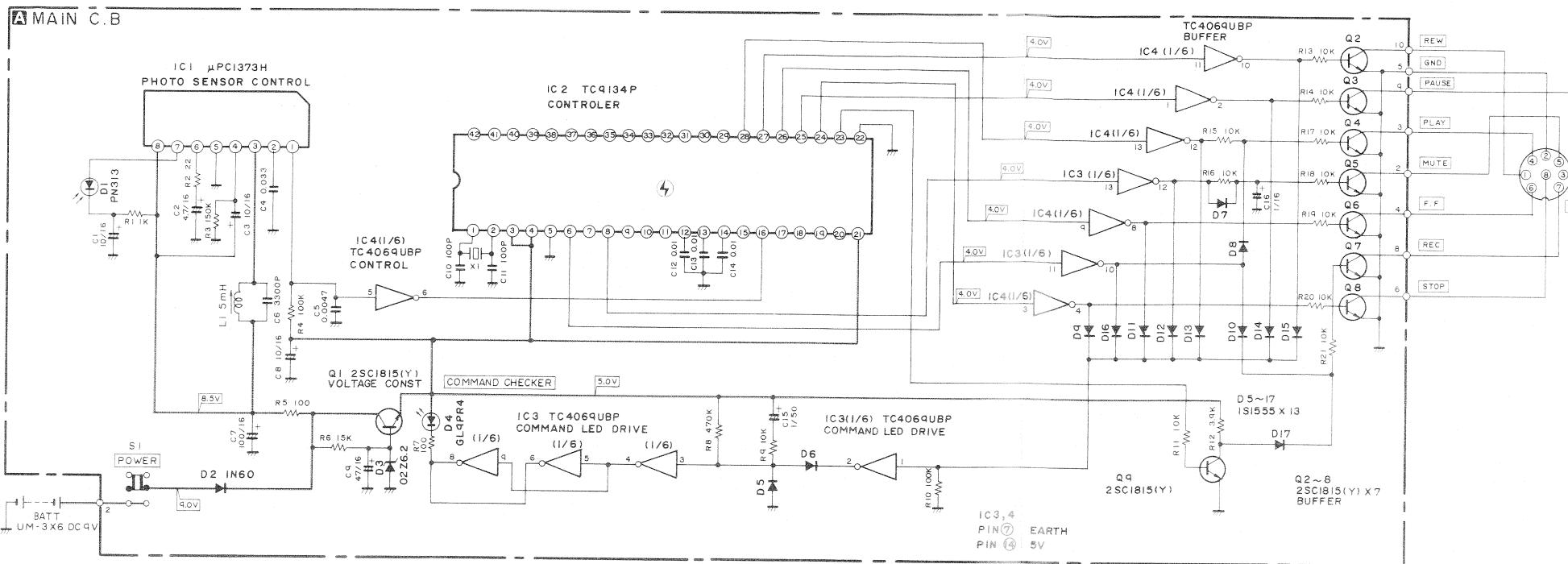
NOTES (1) B(+) Pattern Component side pattern Others pattern

(2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.

SCHEMATIC DIAGRAM, WIRING=RC-R200Y

1 2 3 4 5 6 7 8 9 10 11

A



B

C

D

E

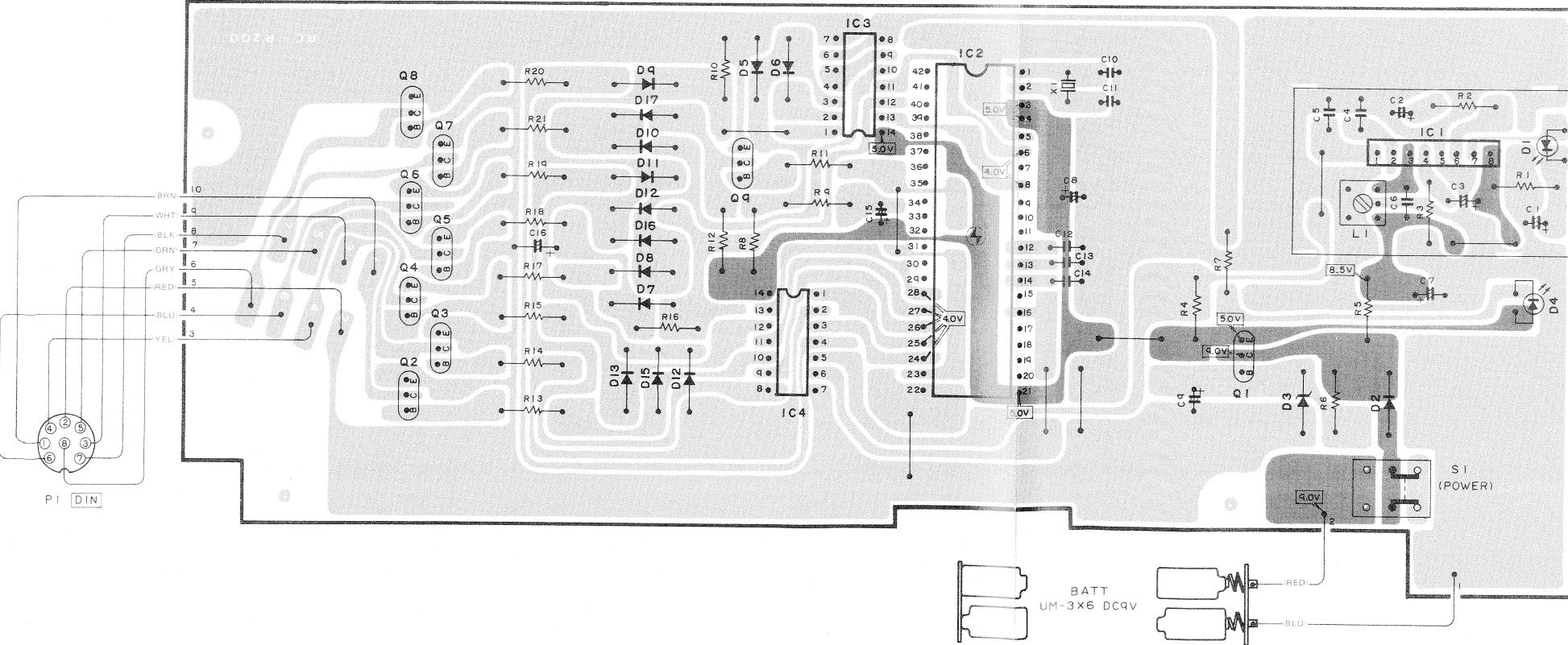
F

G

H

I

A MAIN C.B



NOTES (1) B(+) Pattern Others pattern

(2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.

NOTES:

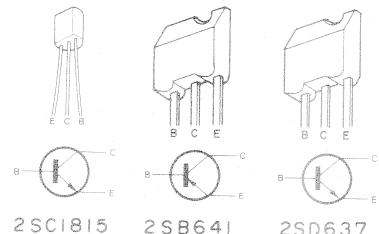
- 1) B (+) power supply
- 2) The voltage is the reference value measured with a tester (20 k-ohms/V DC) when there are no signals.
- 3) Resistors with no designation have a rated power of 1/4W and a tolerance of ±5%.
- 4) Capacitors with no designation have a dielectric strength of less than 50V.
- 5) The only capacitor tolerance indicated are ±5% (J) and ±10% (K).
- 6) Ceramic capacitor symbols:
 - For temperature compensation (SL)
 - High dielectric constant system (YY)
 - High dielectric constant system (YW, YP, YZ)
 - Semiconductor ceramic
- 7) Explanation of symbols
 - Mylar capacitor

• This schematic diagram is subject to change without notice in the interests of improved performance.

C-MOS IC handling precaution

The C-MOS IC's construction makes this part susceptible to damage by static electricity and so take sufficient care in regard to following articles.

1. Need to be put on conductive sheet, to be put in a metallic box and to be wrapped by aluminium foil for transportation and deposit.
2. To use solder iron less than 40W (less than 260°C) of power consumption for soldering. But do not overheat more than 10 second.
3. Do not perform a conductivity test with a tester, etc. Refer to the circuit voltages of each part.
4. The ICs on the electrical parts which are indicated by an C-MOS IC symbol mark (Ⓐ).



ELECTRICAL MAIN PARTS LIST

| Symbol No. | Part No. | Description |
|--|----------------------------------|--------------------------------------|
| <<MAIN CIRCUIT BOARD SECTION>> | | |
| PCB-A | * | Main circuit board |
| IC4 | 87-027-830-01 | IC, HD 7407 |
| IC5 | 87-027-816-01 | IC, TC4050BP |
| ④ IC6 | 87-027-828-01 | IC, TC9134P |
| ④ IC7,8,9,10 | 87-027-298-01 | IC, CMOS4001 NOR |
| IC11 | 87-027-840-01 | IC, M54519P |
| IC12,13 | 87-027-829-01 | IC, TK10321 |
| IC14 | 87-027-827-01 | IC, TC4069UBP |
| ④ IC15 | 87-027-564-01 | IC, CMOSTC4011PB |
| IC16 | 87-027-371-01 | IC, 4558DA |
| IC17 | 87-027-678-01 | IC, LM13600N |
| Q5 | 89-318-155-01 | Transistor, 2SC1815 (GR) |
| Q6,7,14 17,18 | 89-304-582-31 | Transistor, 2SC458(Q) |
| Q8,9,11,12 | 89-406-555-01 | Transistor, 2SD655E |
| Q10,13 | 89-110-154-01 | Transistor, 2SA1015 (Y) |
| Q16 | 89-320-011-01 | Transistor, 2SC2001 (K) |
| Q15,19,20, 23,25 | 89-107-336-71 | Transistor, 2SA733 (P,Q) |
| Q21 | 89-405-712-06 | Transistor, 2SD571 (L) |
| Q24 | 89-408-804-01 | Transistor, 2SD880 (Y) |
| Q22 | 89-316-274-01 | Transistor, 2SD1627 (Y) |
| D12,13,14, 15,16,17 18,19,20, 21,22,23, 24,25,26, 27,28,29, 30,31,33, 34,35,36, 37,38,39, 40,41,42, 43,44,45, 46,47,48, 53,54,59, 60,61,62, 63,64,72 | 87-027-097-01 (87-027-219-01) | Diode, 1S1555 (Diode, MA150) |
| D32,51,52 | 87-027-365-01 | Diode, S5277B |
| D49,71 | 87-027-606-01 | Zener diode, HZ7C2L |
| D50 | 87-027-402-01 | Zener diode, HZ242L |
| D55 | 87-027-376-01 | Diode, 1B4B41 |
| D56,57 | 87-027-364-01 | Zener diode, HZ12A3L |
| TH1 | 82-304-722-01 | Thermister, 42D26 |
| TH2 | 87-026-178-01 | Thermister, 250Ω |
| X1 | 87-008-246-01 | Ceramic resonator |
| RY1 | 87-045-149-01 | Relay, DC12V U |
| J1,2,3,4 | 87-049-055-01 | Pin jack, 4P (AUX, TUNER) |
| J5,6 | 87-049-079-01 | DIN socket, 5P (AMP, PHONO, TAPE) |
| J7 | 87-032-985-01 | DIN socket, 8P (DECK CONTROL) |
| J8 | 87-032-892-01 | Jack, 2.5φ (PHONO, START/CUT) |
| SFR1 | 87-021-616-01 | Semi-fixed resistor, 100kΩ-B |
| SFR2 | 87-021-615-01 | Semi-fixed resistor, 47kΩ-B |
| SFR3 | 87-021-612-01 | Semi-fixed resistor, 4.7kΩ-B |
| <<FRONT CIRCUIT BOARD SECTION>> | | |
| IC1 | 87-027-826-01 | IC, μPC1373H |
| ④ IC2 | 87-027-298-01 | IC, CMOS4001 NOR |
| IC3 | 87-027-832-01 | IC, TA7612AP |
| Q1 | 89-318-155-01 | Transistor, 2SC1815 (GR) |
| Q2,3,4 | 89-304-582-31 | Transistor, 2SC458 (Q) |
| D1 | 87-026-186-01 | Photo diode, PIN PN313 |
| D2 | 87-027-543-01 | LED, LN317GP |

| Symbol No. | Part No. | Description |
|---|---------------|---|
| <<MAIN CIRCUIT BOARD SECTION>> | | |
| D3,4 | 87-027-097-01 | Diode, 1S1555 |
| D5,6,7,8 9 | 87-027-542-01 | LED, LN217RP |
| D10 | 87-027-834-01 | LED, LN242RP |
| D11 | 87-027-835-01 | LED ass'y, GL-109R1 |
| L1 | 87-005-149-01 | Coil, 5mH |
| S1,2,3,4, 5,6,7,8 | 87-031-665-01 | Light tact switch (REMOTE, TUNER, AUX. PHOTO, TAPE, DOWN, UP, MUTE) |
| <<Capacitor>> | | |
| C1,13 | 87-015-681-01 | 10μF 16V Electrolytic |
| C6,7 | 87-015-684-01 | 47μF 16V Electrolytic |
| C12 | 87-015-677-01 | 100μF 6.3V Electrolytic |
| <<JACK CIRCUIT BOARD SECTION>> | | |
| D58,65,66, 67,68,69 70 | 87-027-097-01 | Diode, 1S1555 |
| J9,10 | 87-049-064-01 | Pin jack, 16P (TIMER, TUNER) |
| <<SWITCH CIRCUIT BOARD SECTION>> | | |
| △S9 | 87-031-687-01 | Push switch (POWER) |
| <<AC OUTLET CIRCUIT BOARD SECTION>> ="H", "HU" model only | | |
| △PCB-E | * | AC outlet circuit board |
| △J11,12 | 87-049-070-01 | AC outlet |
| <<AC OUTLET CIRCUIT BOARD SECTION>> ="E" model only | | |
| △PCB-E | * | AC outlet circuit board |
| △J11,12 | 87-049-014-01 | AC outlet |
| △F1 | 87-035-139-01 | Fuse, "T" 2.5A |
| | 87-098-020-01 | Fuse label, "T" 2.5A |
| | 87-033-147-01 | Fuse clamp |
| <<AC OUTLET CIRCUIT BOARD SECTION>> ="K", "G" model only | | |
| △PCB-E | * | AC outlet circuit board |
| △J11,12 | 87-032-996-01 | AC outlet |
| << MISCELLANEOUS >> | | |
| △T1 | 86-197-602-01 | Power transformer (H, HU model only) |
| △T1 | 86-197-604-01 | Power transformer (E model only) |
| △T1 | 86-197-605-01 | Power transformer (K, G model only) |
| | 87-034-956-01 | AC power cord (H, HU model only) |
| | 87-034-877-01 | AC power cord (E model only) |
| | 87-034-872-01 | AC power cord (K model only) |
| | 87-034-892-01 | AC power cord (G model only) |
| △S10 | 87-031-617-01 | Slide switch (VOLTAGE SELECTOR) (H, HU model only) |
| | 87-085-165-01 | Cord bushing (H, HU model only) |
| | 87-085-166-01 | Holder, AC power cord (E,K,G model only) |
| | 86-198-800-01 | Remote control transmitter, RC-T500 |

⚠ Safety component symbol

This symbol is given to important parts which serve to maintain the safety of the product, and which are made to conform to special safety specifications. Therefore, when replacing a component with this symbol, make absolutely sure that you use a designated part.

WIRING (POWER SECTION = E,K,G MODEL)

1 2 3 4 5

A
B
C
D
E
F
G
H
I
J

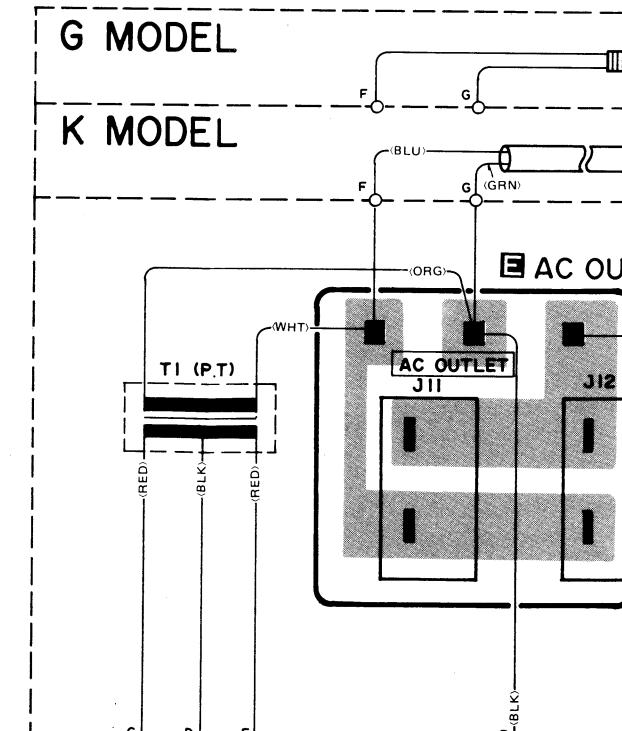
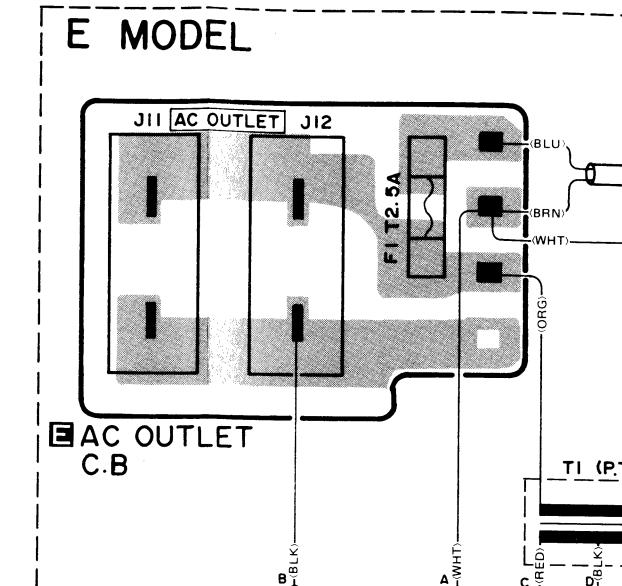
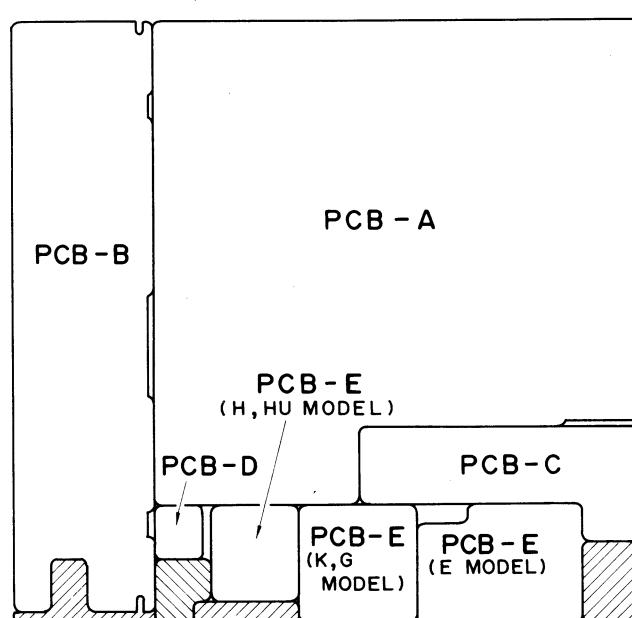
C-MOS IC handling precaution
The C-MOS IC's construction makes this part susceptible to damage by static electricity and so take sufficient care in regard to following articles.

1. Need to be put on conductive sheet, to be put in a metallic box and to be wrapped by aluminium foil for transportation and deposit.
2. To use solder iron less than 40W (less than 260°C) of power consumption for soldering. But do not overheat more than 10 second.
3. Do not perform a conductivity test with a tester, etc. Refer to the circuit voltages of each part.
4. The ICs on the electrical parts list which are indicated by an C-MOS IC symbol mark (④).

Note; Combination Circuit Board

The parts on the electrical parts list which are indicated by an asterisk (*) are supplied as one single combined circuit board. Therefore, they will not be supplied separately. If this becomes necessary, please order the entire circuit board.

Combination circuit board 86-197-610-01



WIRING (POWER SECTION = E,K,G MODEL)

1 2 3 4 5 6 7 8

| Symbol No. | Part No. | Description |
|-------------------------------------|---------------|---|
| D3,4 | 87-027-097-01 | Diode, 1S1555 |
| D5,6,7,8 | 87-027-542-01 | LED, LN217RP |
| 9 | | |
| D10 | 87-027-834-01 | LED, LN242RP |
| D11 | 87-027-835-01 | LED ass'y, GL-109R1 |
| L1 | 87-005-149-01 | Coil, 5mH |
| S1,2,3,4, 5,6,7,8 | 87-031-665-01 | Light tact switch (REMOTE, TUNER, AUX. PHOTO, TAPE, DOWN, UP, MUTE) |
| < Capacitor > | | |
| C1,13 | 87-015-681-01 | 10μF 16V Electrolytic |
| C6,7 | 87-015-684-01 | 47μF 16V Electrolytic |
| C12 | 87-015-677-01 | 100μF 6.3V Electrolytic |
| « JACK CIRCUIT BOARD SECTION » | | |
| D58,65,66, 67,68,69 | 87-027-097-01 | Diode, 1S1555 |
| 70 | | |
| J9,10 | 87-049-064-01 | Pin jack, 16P (TIMER, TUNER) |
| « SWITCH CIRCUIT BOARD SECTION » | | |
| △S9 | 87-031-687-01 | Push switch (POWER) |
| « AC OUTLET CIRCUIT BOARD SECTION » | | |
| △PCB-E | * | AC outlet circuit board |
| △J11,12 | 87-049-070-01 | AC outlet |
| « AC OUTLET CIRCUIT BOARD SECTION » | | |
| △PCB-E | * | AC outlet circuit board |
| △J11,12 | 87-049-014-01 | AC outlet |
| △F1 | 87-035-139-01 | Fuse, "T" 2.5A |
| | 87-098-020-01 | Fuse label, "T" 2.5A |
| | 87-033-147-01 | Fuse clamp |
| « AC OUTLET CIRCUIT BOARD SECTION » | | |
| △PCB-E | * | AC outlet circuit board |
| △J11,12 | 87-032-996-01 | AC outlet |
| « MISCELLANEOUS » | | |
| △T1 | 86-197-602-01 | Power transformer (H, HU model only) |
| △T1 | 86-197-604-01 | Power transformer (E model only) |
| △T1 | 86-197-605-01 | Power transformer (K, G model only) |
| | 87-034-956-01 | AC power cord (H, HU model only) |
| | 87-034-877-01 | AC power cord (E model only) |
| | 87-034-872-01 | AC power cord (K model only) |
| | 87-034-892-01 | AC power cord (G model only) |
| △S10 | 87-031-617-01 | Slide switch (VOLTAGE SELECTOR) (H, HU model only) |
| | 87-085-165-01 | Cord bushing (H, HU model only) |
| | 87-085-166-01 | Holder, AC power cord (E,K,G model only) |
| | 86-198-800-01 | Remote control transmitter, RC-T500 |

C-MOS IC handling precaution

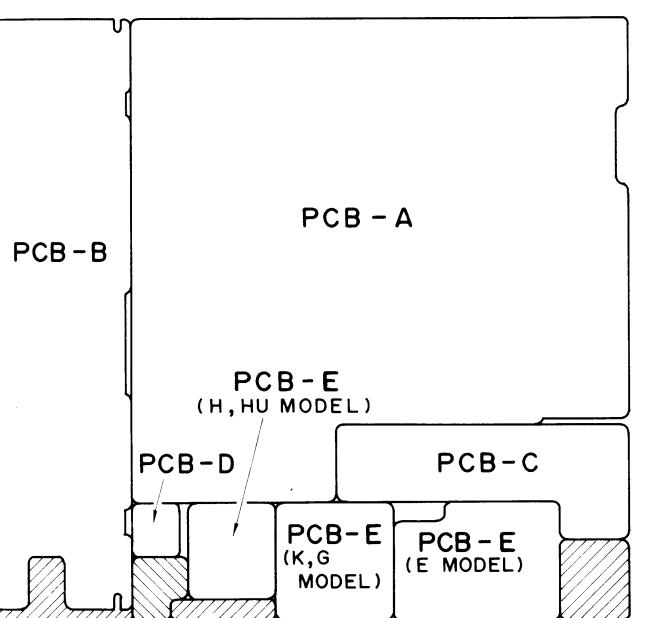
The C-MOS IC's construction makes this part susceptible to damage by static electricity and so take sufficient care in regard to following articles.

1. Need to be put on conductive sheet, to be put in a metallic box and to be wrapped by aluminium foil for transportation and deposit.
2. To use solder iron less than 40W (less than 260°C) of power consumption for soldering. But do not overheat more than 10 second.
3. Do not perform a conductivity test with a tester, etc. Refer to the circuit voltages of each part.
4. The ICs on the electrical parts which are indicated by an C-MOS IC symbol mark (④).

Note: Combination Circuit Board

The parts on the electrical parts list which are indicated by an asterisk (*) are supplied as one single combined circuit board. Therefore, they will not be supplied separately. If this becomes necessary, please order the entire circuit board.

Combination circuit board 86-197-610-01



A

B

C

D

E

F

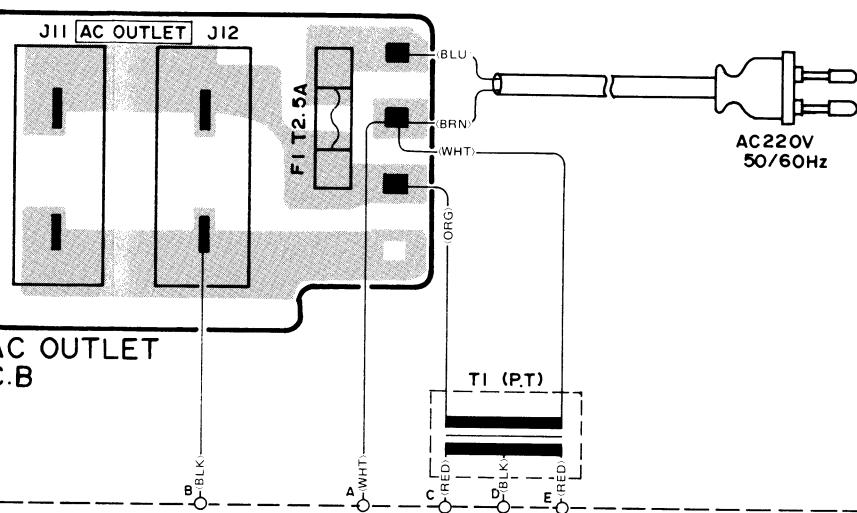
G

H

I

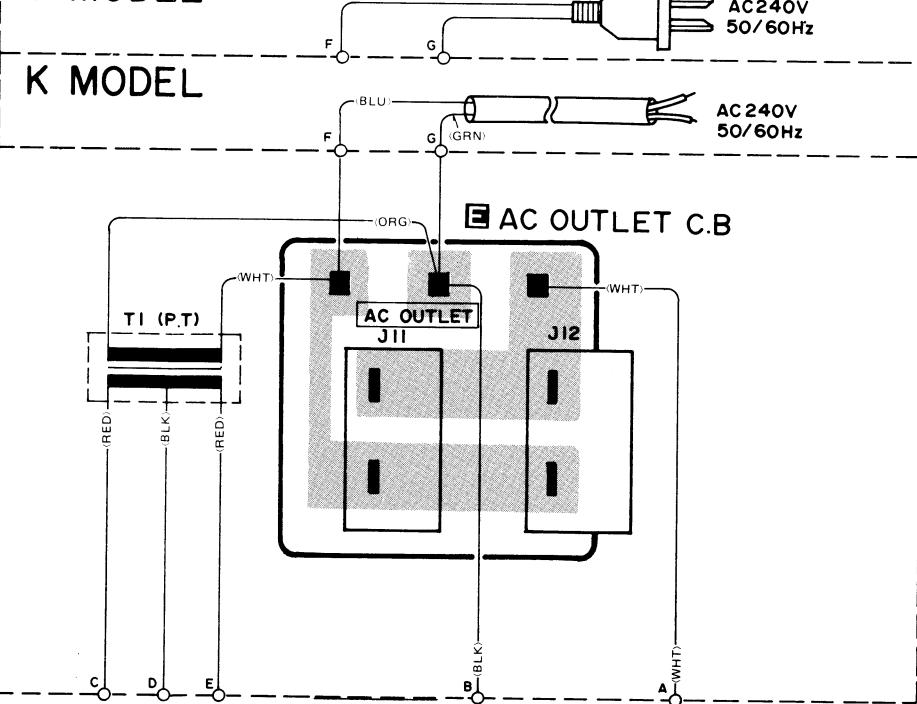
J

E MODEL



G MODEL

K MODEL



Safety component symbol

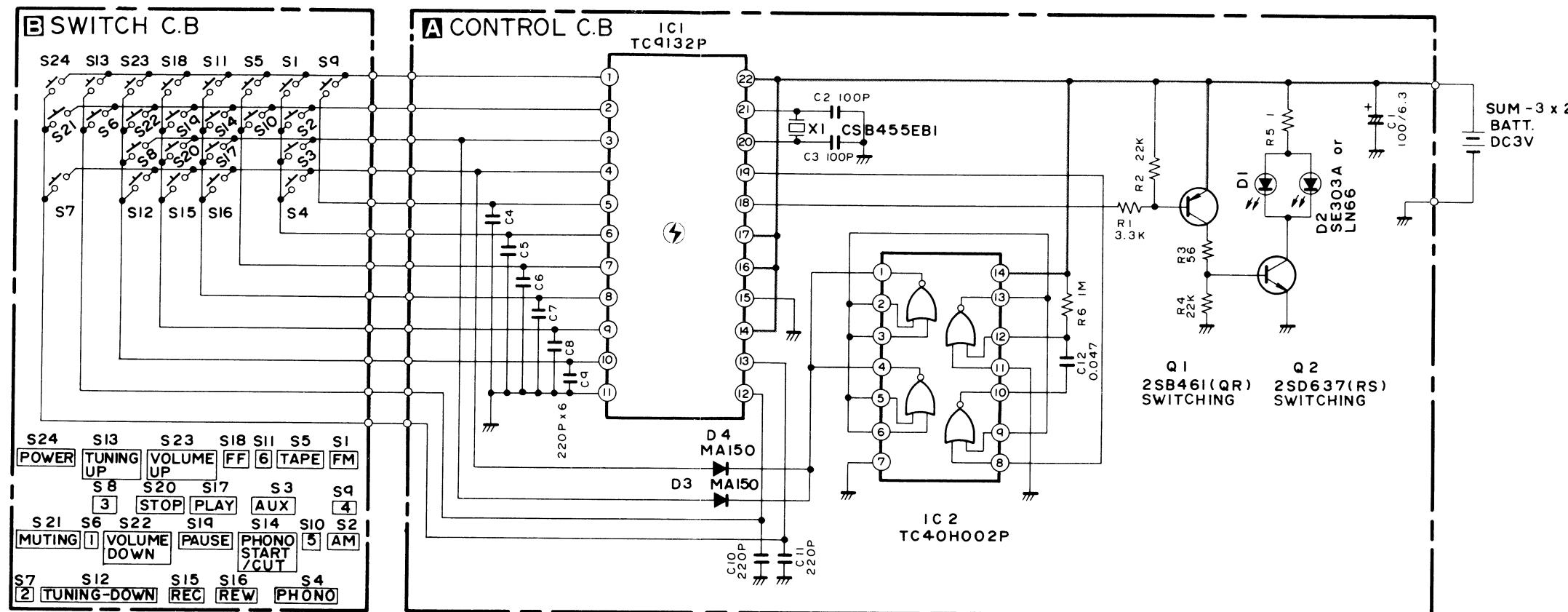
This symbol is given to important parts which serve to maintain the safety of the product, and which are made to conform to special safety specifications. Therefore, when replacing a component with this symbol, make absolutely sure that you use a designated part.

on
R
B
5 (GR)
(Q)
E
5 (Y)
1 (K)
(P,Q)
(L)
(Y)
7 (Y)
2L
2L
A3L
TUNER)
PE)
CUT)
100kΩ-B
47kΩ-B
4.7kΩ-B
ark killer
ramic
R
5 (GR)
(Q)
N313

SCHEMATIC DIAGRAM, WIRING

1 2 3 4 5 6 7 8 9 10 11 12 13

A

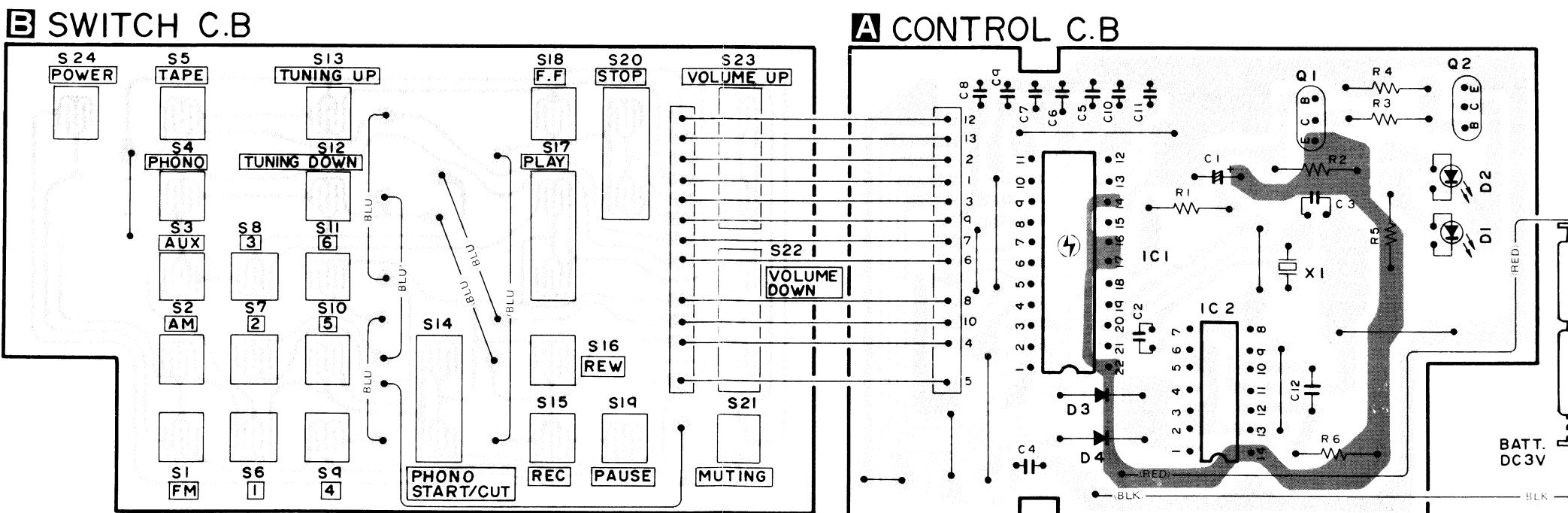


NOTES:

- 1) B (+) power supply
- 2) Resistors with no designation have a rated power of 1/4W and a tolerance of $\pm 5\%$.
- 3) Capacitors with no designation have a dielectric strength of less than 50VW.
- 4) The only capacitor tolerance indicated are $\pm 5\%$ and $\pm 10\%$ (K).

• This schematic diagram is subject to change without notice in the interests of improved performance

F



NOTES (1) B(+) Pattern Others pattern
(2) The voltage is the reference value measured (20 K ohms/V DC) when there are no

C-MOS IC handling precaution

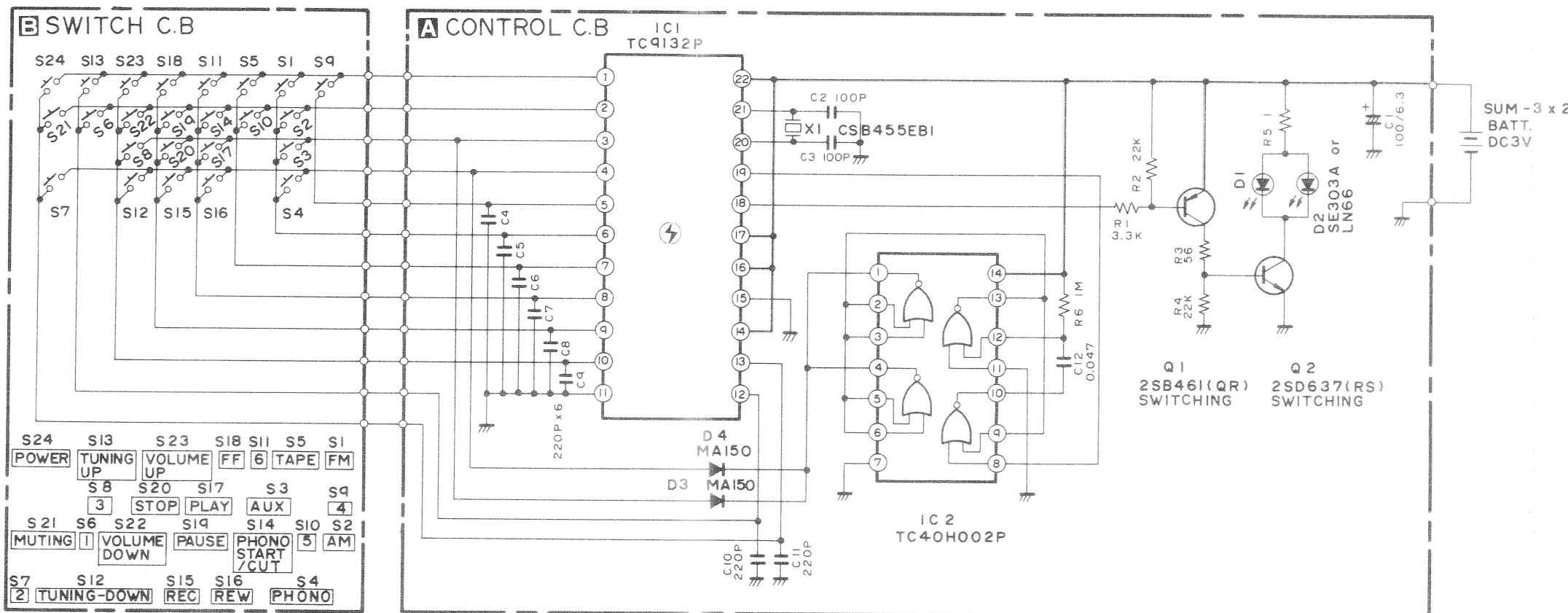
The C-MOS IC's construction makes this part susceptible by static electricity and so take sufficient care in regarding articles.

1. Need to be put on conductive sheet, to be put in a metal box and to be wrapped by aluminium foil for transportation.
2. To use solder iron less than 40W (less than 260°C) for soldering. But do not overheat more than 10 seconds.
3. Do not perform a conductivity test with a tester, etc. in the circuit voltages of each part.
4. The ICs on the electrical parts which are indicated by C-MOS IC symbol mark (⚡).

SCHEMATIC DIAGRAM, WIRING

1 2 3 4 5 6 7 8 9 10 11 12 13

A

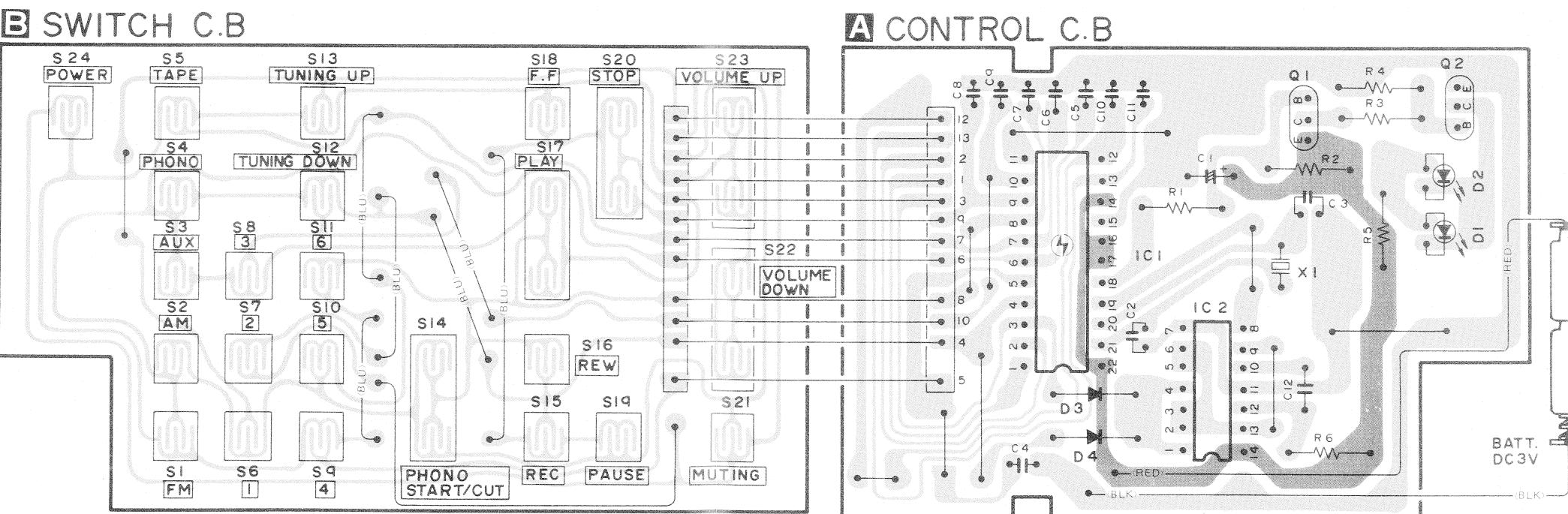


NOTES:

- 1) B (+) power supply
- 2) Resistors with no designation have a rated power of 1/4W and a tolerance of $\pm 5\%$.
- 3) Capacitors with no designation have a dielectric strength of less than 50V.
- 4) The only capacitor tolerance indicated are $\pm 5\%$ and $\pm 10\%$ (K).

• This schematic diagram is subject to change without notice in the interests of improved performance.

F



NOTES (1) B (+) Pattern Others pattern

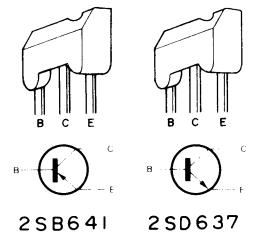
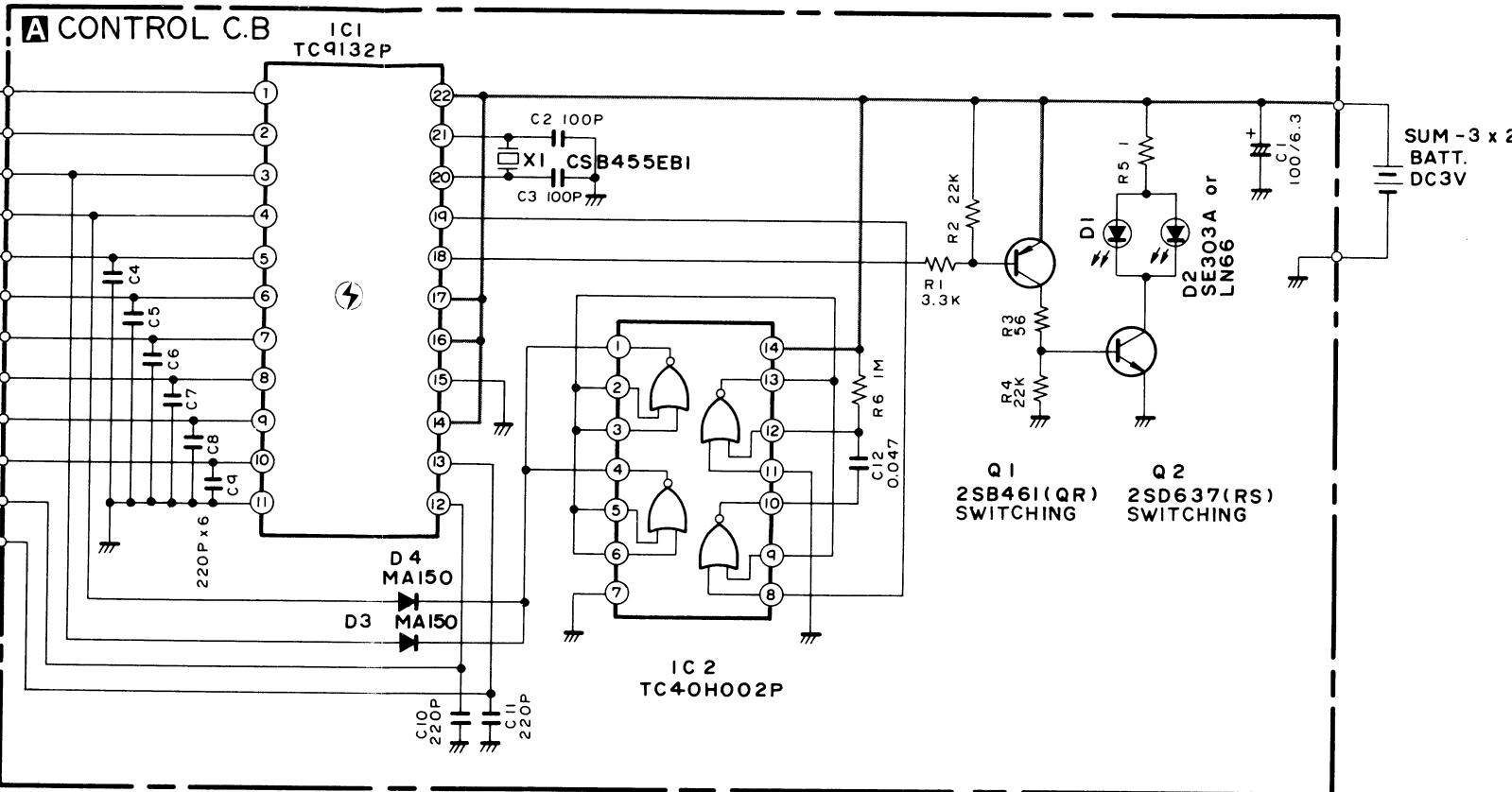
(2) The voltage is the reference value measured (20 K ohms/V DC) when there are no

C-MOS IC handling precaution

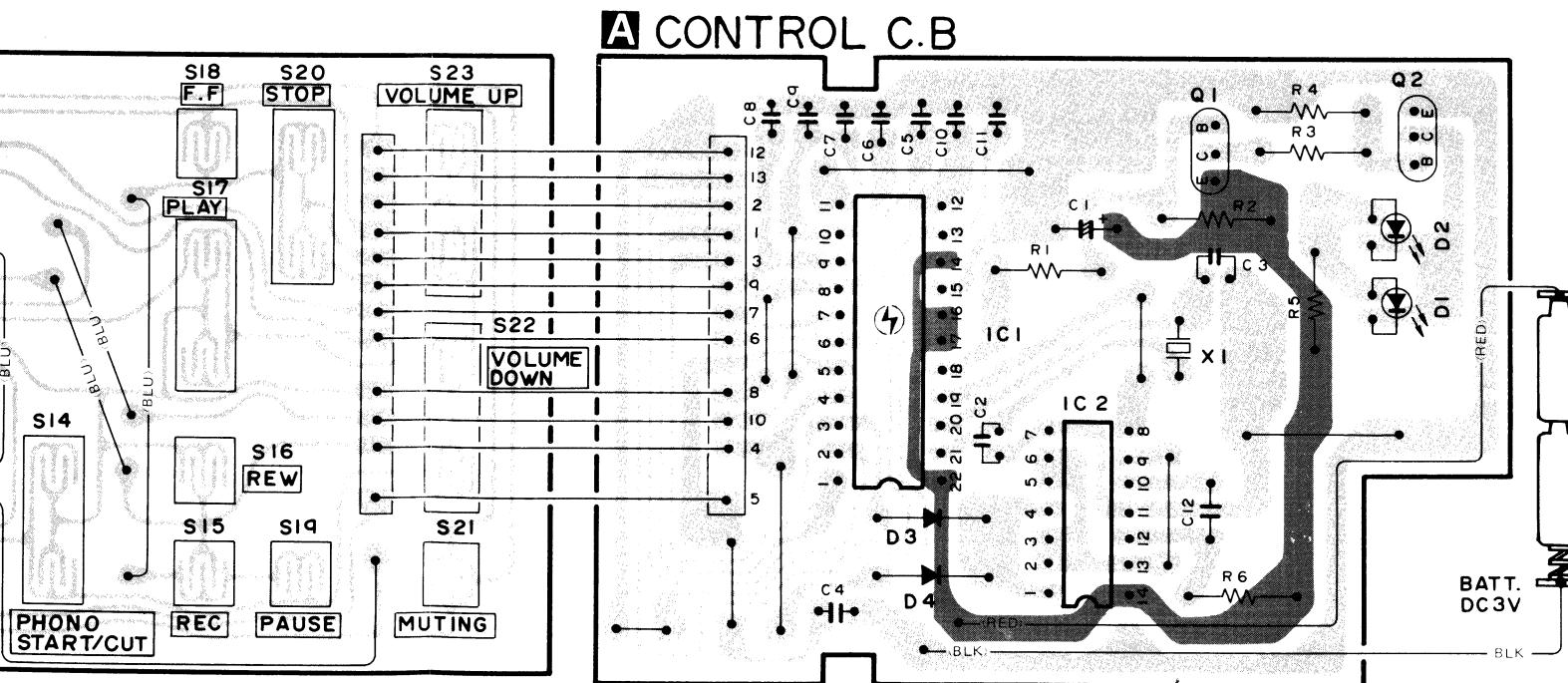
The C-MOS IC's construction makes this part susceptible by static electricity and so take sufficient care in regarding articles.

1. Need to be put on conductive sheet, to be put in a metal box and to be wrapped by aluminium foil for transportation deposit.
2. To use solder iron less than 40W (less than 260°C) for soldering. The soldering time consumption for soldering. But do not overheat more than 2 seconds.
3. Do not perform a conductivity test with a tester, etc. in the circuit voltages of each part.
4. The ICs on the electrical parts which are indicated by the C-MOS IC symbol mark (⊕).

4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13



NOTES (1) B(+) Pattern Others pattern
 (2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.



C-MOS IC handling precaution

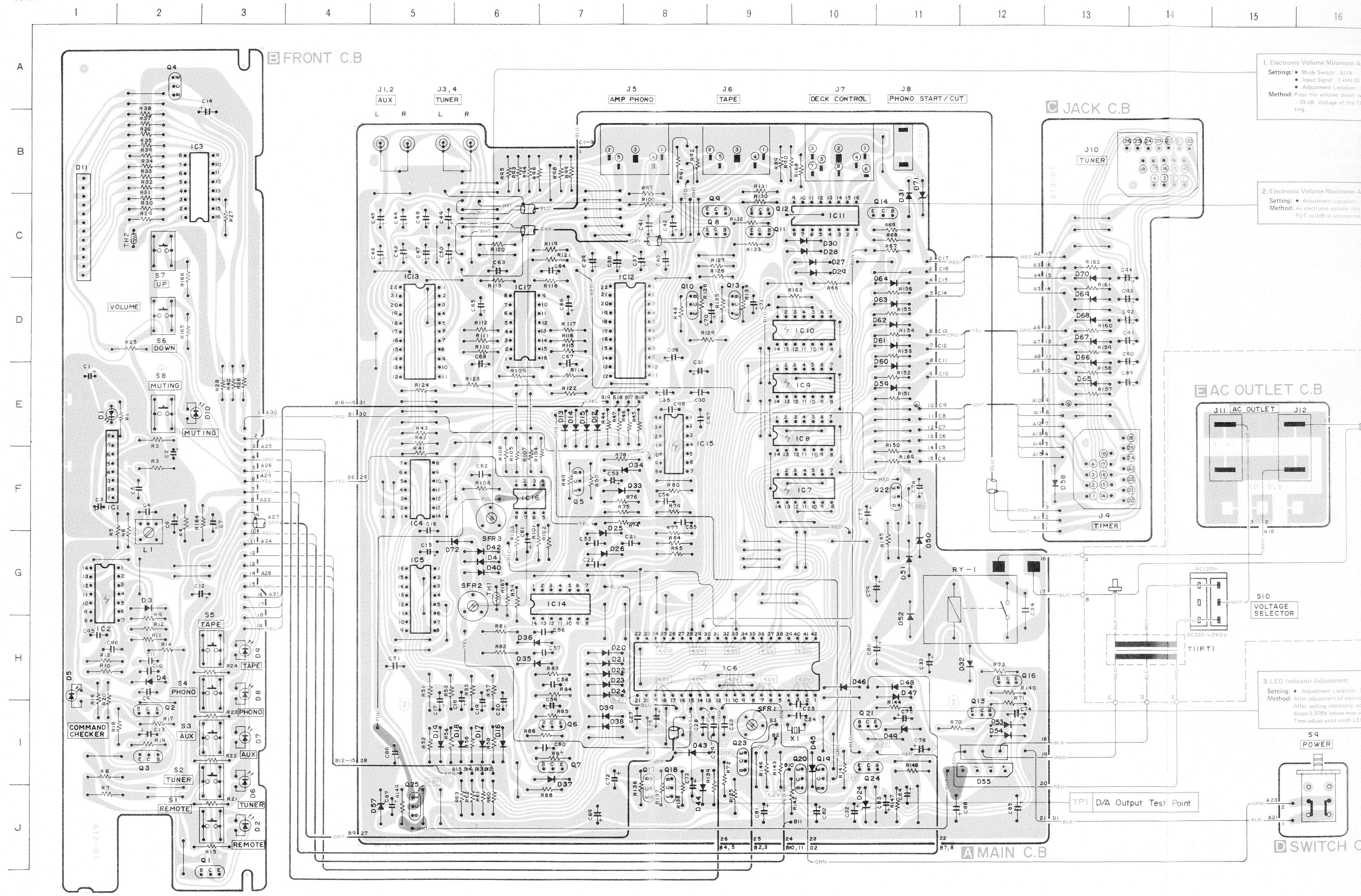
The C-MOS IC's construction makes this part susceptible to damage by static electricity and so take sufficient care in regard to following articles.

1. Need to be put on conductive sheet, to be put in a metallic box and to be wrapped by aluminium foil for transportation and deposit.
2. To use solder iron less than 40W (less than 260°C) of power consumption for soldering. But do not overheat more than 10 second.
3. Do not perform a conductivity test with a tester, etc. Refer to the circuit voltages of each part.
4. The ICs on the electrical parts which are indicated by an C-MOS IC symbol mark (⚡).

WIRING

NOTES (1) B(+) Pattern B(-) Pattern Others pattern

(2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when

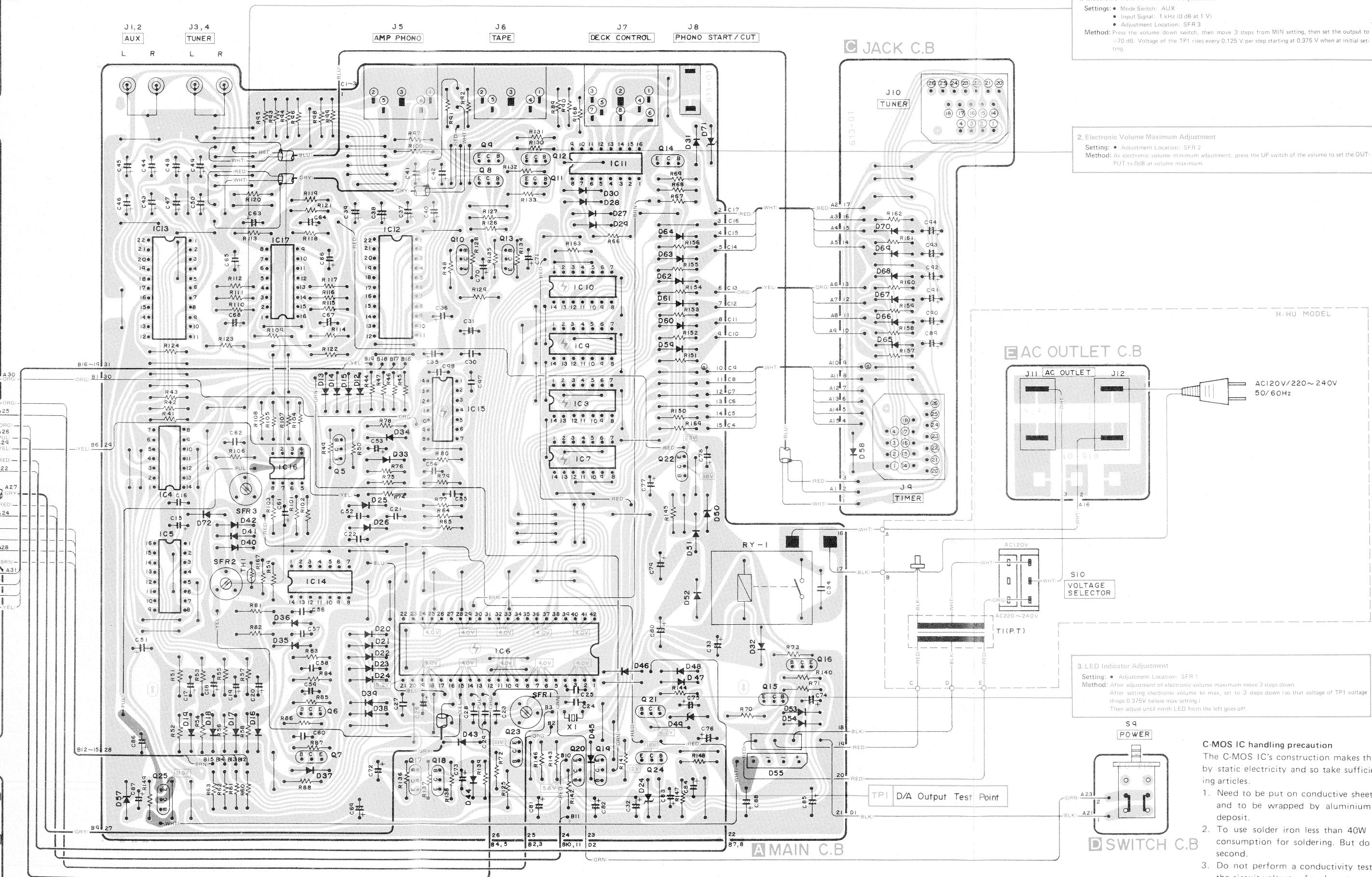


NOTES (1) B(+) Pattern B(-) Pattern Others pattern

(2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.

4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

B FRONT C.B



C JACK C.B

1. Electronic Volume Minimum Adjustment
Settings: • Mode Switch: AUX
• Input Signal: 1 kHz (0 dB at 1 V)
• Adjustment Location: SFR 3
Method: Press the volume down switch, then move 3 steps from MIN setting, then set the output to -70 dB. Voltage of the TP1 rises every 0.125 V per step starting at 0.375 V when at initial setting.

2. Electronic Volume Maximum Adjustment
Setting: • Adjustment Location: SFR 2
Method: As electronic volume minimum adjustment, press the UP switch of the volume to set the OUTPUT to 0dB at volume maximum.

H-HU MODEL

E AC OUTLET C.B

J11 AC OUTLET AC120V/220~240V 50/60Hz

J12 AC OUTLET AC120V/220~240V 50/60Hz

S10 VOLTAGE SELECTOR

S9 POWER

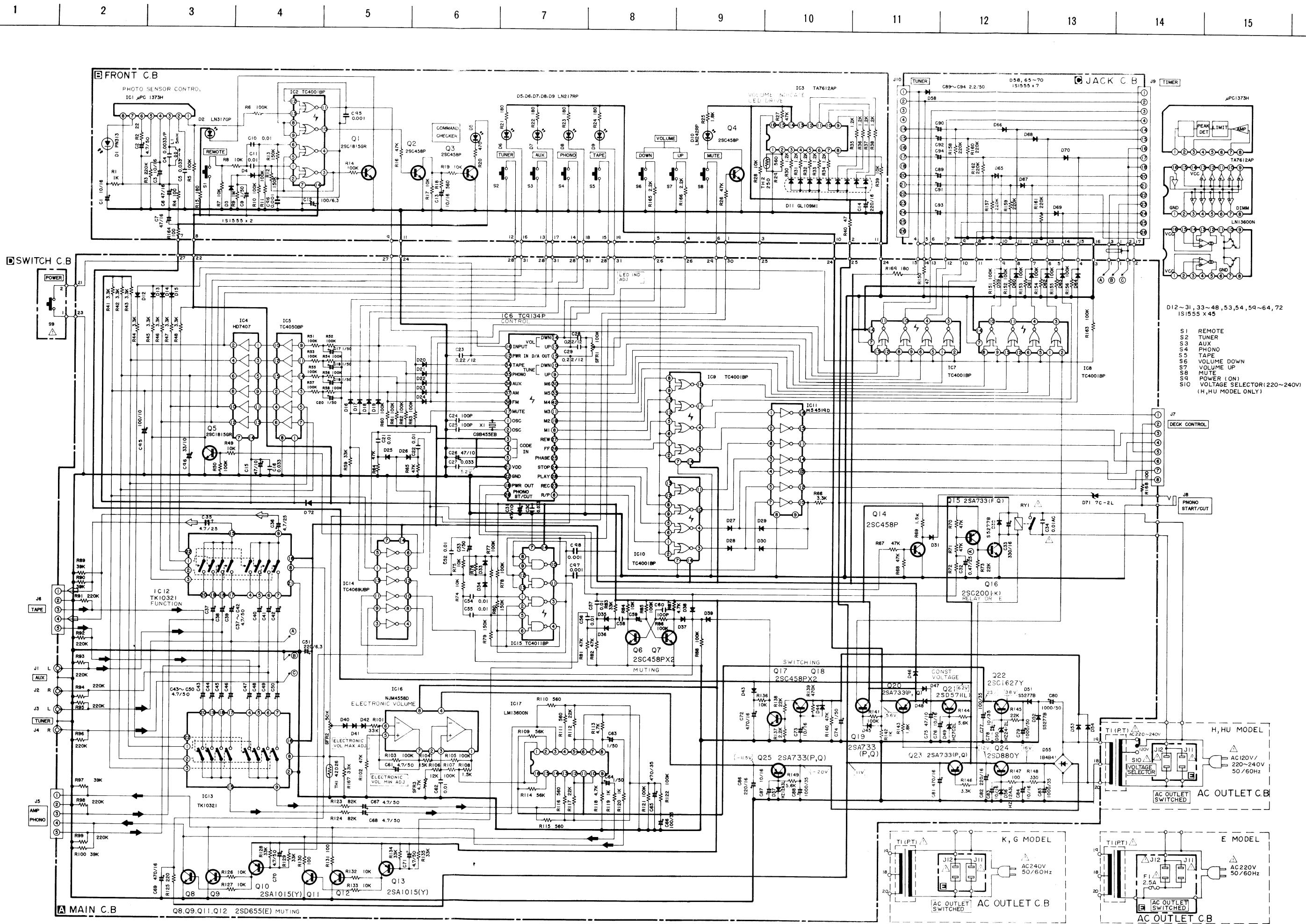
SWITCH C.B.

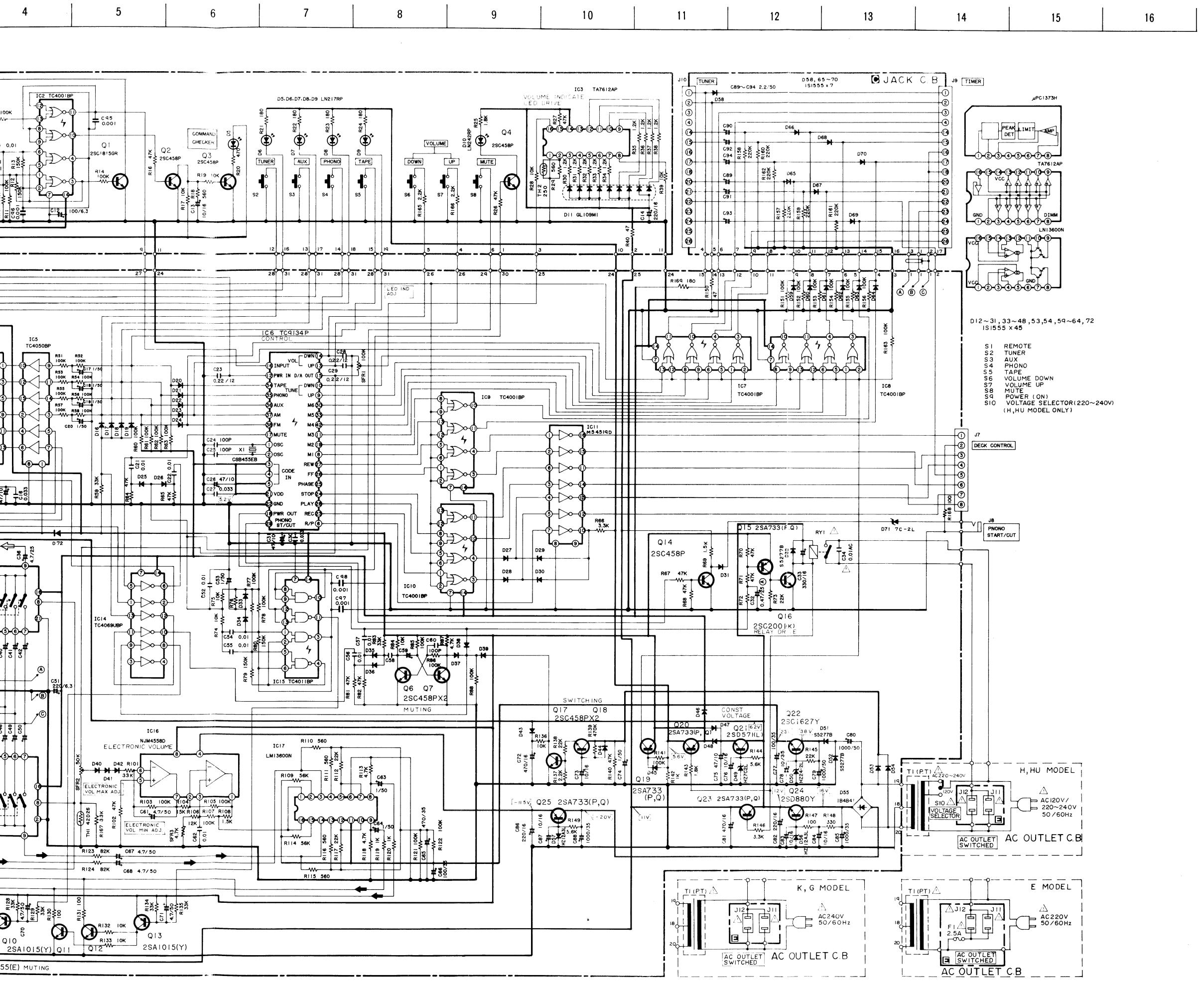
C-MOS IC handling precaution

The C-MOS IC's construction makes this part susceptible to damage by static electricity and so take sufficient care in regard to following articles.

1. Need to be put on conductive sheet, to be put in a metallic box and to be wrapped by aluminium foil for transportation and deposit.
2. To use solder iron less than 40W (less than 260°C) of power consumption for soldering. But do not overheat more than 10 second.
3. Do not perform a conductivity test with a tester, etc. Refer to the circuit voltages of each part.
4. The ICs on the electrical parts which are indicated by an C-MOS IC symbol mark (④).

SCHEMATIC DIAGRAM





NOTES:

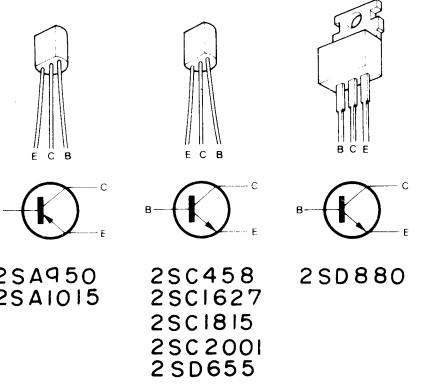
- B (+) power supply B (-) power supply
- Signal path
- Rec path
- The voltage is the reference value measured with a tester (20 k-ohms/V DC) when there are no signals.
- Resistors with no designation have a rated power of 1/4W and a tolerance of ±5%.
- Capacitors with no designation have a dielectric strength of less than 50VW.
- The only capacitor tolerance indicated are ±5% (J) and ±10% (K).
- Ceramic capacitor symbols:

 - High dielectric constant system (YW, YP, YZ)

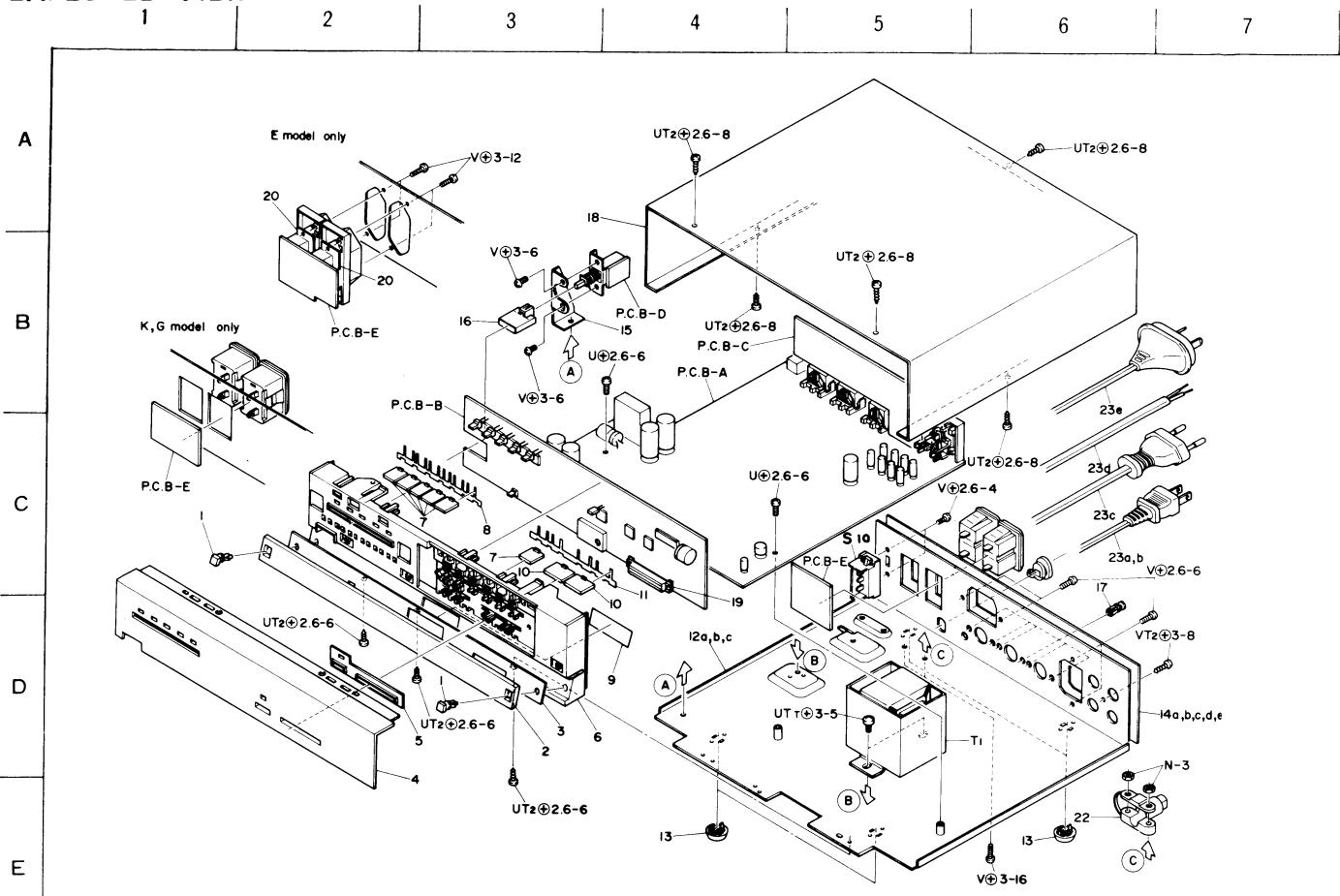
- Explanation of symbols
- Mylar capacitor
- Safety component symbol

This symbol is given to important parts which serve to maintain the safety of the product, and which are made to conform to special safety specifications. Therefore, when replacing a component with this symbol, make absolutely sure that you use a designated part.

- This schematic diagram is subject to change without notice in the interests of improved performance.



EXPLODED VIEW



MECHANICAL PARTS

PARTS LIST

- * mark in this part list shows exclusive part

| PART IN THIS PART LIST SHOWS EXCLUSIVE PART | | | | | |
|---|---------------|------------------------|--|-----------------|------|
| Ref. No. | Part No. | Part No. Chabged to | Description | Common Model | Q'ty |
| 1 | 82-769-010-01 | | Nylon rivet ass'y | | 2 |
| 2 | 82-779-012-01 | | Window | ST-R80 | 1 |
| 3 | 86-197-004-01 | | Plate | * | 1 |
| 4 | 86-197-001-01 | | Panel, Front D | * | 1 |
| 5 | 86-197-005-01 | | Guide, Button | * | 1 |
| 6 | 82-779-001-21 | | Cabinet, Front | ST-R80 | 1 |
| 7 | 82-779-007-01 | | Push-key | ST-R80 | 6 |
| 8 | 82-779-211-01 | | Plate spring A | ST-R80 | 1 |
| 9 | 86-197-207-01 | | Sheet | * | 1 |
| 10 | 86-197-020-01 | | Push-key (GRY) | * | 2 |
| 11 | 82-770-212-01 | | Plate spring B | SA-A35 | 1 |
| 12a | 86-197-201-01 | | Chassis amp. ass'y D (H, HU model only) | * | 1 |
| 12b | 86-197-203-01 | | Chassis amp. ass'y E (E model only) | * | 1 |
| 12c | 86-197-205-01 | | Chassis amp. ass'y K (K, G model only) | * | 1 |
| 13 | 82-745-019-01 | | Foot | | 4 |
| 14a | 86-197-007-01 | | Jack plate H (H model only) | * | 1 |
| 14b | 86-197-008-01 | | Jack plate U (HU model only) | * | 1 |
| 14c | 86-197-009-01 | | Jack plate E (E model only) | * | 1 |
| 14d | 86-197-010-01 | | Jack plate K (K model only) | * | 1 |
| 14e | 86-197-012-01 | | Jack plate G (G model only) | * | 1 |
| 15 | 82-779-210-01 | | Holder, Power | ST-R80 | 1 |
| 16 | 82-780-008-01 | | Push-button C | SA-C80 | 1 |
| 17 | 87-085-102-01 | | Nylon rivet | | 6 |
| 18 | 82-780-012-01 | | Cabinet, Steel | SA-C80 | 1 |
| 19 | 86-197-208-01 | | Spacer VL | * | 1 |
| 20 | 82-773-216-01 | | Plate nut E (E model only) | AT-9500 | 2 |
| 21 | 87-085-165-01 | | Cord bushing (H, HU model only) | | 1 |
| 22 | 87-085-166-01 | | Holder, AC power cord (E, K, G model only) | | 1 |
| 23a | 87-034-934-01 | | AC power cord H (H model only) | | 1 |
| 23b | 87-034-935-01 | | AC power cord U (HU model only) | | 1 |
| 23c | 87-934-877-01 | | AC power cord E (E model only) | | 1 |
| 23d | 87-934-872-01 | | AC power cord K (K model only) | | 1 |
| 23e | 87-034-892-01 | | AC power cord G (G model only) | | 1 |

ACCESSORIES/PACKAGE=RC-R200

| Ref. No. | Part No. | Part No. changed to | Description | Common Model | Q'ty |
|----------|---------------|------------------------|--------------------------------------|-----------------|------|
| 1 | 86-199-855-01 | | Printed indiv , Packing | * | 1 |
| 2 | 86-199-852-01 | | Cushion L, Printed indiv. | * | 1 |
| 3 | 86-199-853-01 | | Cushion R, Printed indiv. | * | 1 |
| 4 | 87-051-171-11 | | Poly-vinyl sack | | 1 |
| 5 | 86-199-904-01 | | Instructions booklet | * | 1 |
| 6 | 87-056-009-51 | | Distributors list (Y, YG model only) | | 1 |
| 7a | 87-056-045-01 | | Guarantee card (YU model only) | | 1 |
| 7b | 87-056-059-01 | | Guarantee card (YG model only) | | 1 |
| 8 | 87-056-057-01 | | Service station list (YU model only) | | 1 |
| 9 | 86-199-800-01 | | Remote control transmitter RC-T200 | * | 1 |

ACCESSORIES/PACKAGE=RC-R500

| Ref. No. | Part No. | Part No. Chabged to | Description | Common Model | Q'ty |
|----------|---------------|------------------------|---|-------------------|------|
| 1 | 86-197-853-01 | | Printed indiv., Packing | * | 1 |
| 2 | 82-748-856-21 | | Cushion L, Printed indiv. | SA-C50 | 1 |
| 3 | 82-748-857-31 | | Cushion R, Printed indiv. | SA-C50 | 1 |
| 4 | 86-153-854-01 | | Auxiliary box | | 1 |
| 5 | 87-051-131-11 | | Poly-vinyl sack (H, HU model only) | | 1 |
| 6 | 87-051-135-11 | | Poly-vinyl sack | H,HU:1 E,K,G:2 | 1 |
| 7 | 87-056-604-01 | | Poly-vinyl sack | | 1 |
| 8a | 86-197-904-01 | | Instructions booklet (H, HU model only) | * | 1 |
| 8b | 86-197-905-01 | | Instructions booklet (E model only) | * | 1 |
| 8c | 86-197-906-01 | | Instructions booklet (K model only) | * | 1 |
| 8d | 86-197-907-01 | | Instructions booklet (G model only) | * | 1 |
| 9 | 87-051-171-11 | | Poly-vinyl sack | | 1 |
| 10 | 87-056-008-11 | | Label, AC power cord (K model only) | | 1 |
| 11 | 87-056-009-51 | | Distributors list (H,E,K,G model only) | | 1 |
| 12a | 87-056-045-01 | | Guarantee card (HU model only) | | 1 |
| 12b | 87-056-059-01 | | Guarantee card (G model only) | | 1 |
| 13 | 87-032-845-01 | | Siemens plug (H, HU model only) | | 1 |
| 14 | 87-056-057-01 | | Service station list (HU model only) | | 1 |
| 15 | 85-439-002-01 | | Syncrate cord, CW-150K | | 1 |
| 16 | 85-488-001-01 | | Connection cord, CW-250K | | 1 |
| 17 | 85-489-001-01 | | Connection cord, CW-251AK, TO AMP | | 1 |
| 18 | 85-489-002-01 | | Connection cord, CW-251BK, TO DECK | | 1 |
| 19 | 85-493-001-01 | | Connection cord, CW-201K | | 1 |
| 20 | 85-498-820-01 | | Connection cord, CW-206DSK | | 1 |
| 21 | 86-198-800-01 | | Remote control transmitter, RC-T500 | | 1 |